This listing of claims will replace all prior versions and listings of claims in the above-identified application:

1. (Cancelled).

2. (Cancelled).

3. (Cancelled).

4. (Cancelled).

5. (Cancelled).

6. (Currently Amended) A method of indicating selection, based on a force applied to a pointing device, comprising:

determining a period of relatively increasing vertical component of said force;

accumulating a magnitude of said vertical component of said force over said period;

accumulating a magnitude of a pointing component of said force over said period;

comparing said accumulation of said magnitude of said vertical component of said force to said accumulation of said magnitude of said pointing component of said force; and

determining that said magnitude of said vertical component of said force exceeds said magnitude of said pointing component of said force by a predetermined threshold.

7. (Previously Presented) The method according to claim 6 wherein a selection sensitivity is adjustable by adjusting a value of said predetermined threshold.

8. (Currently Amended) A method of maintaining selection based on a force applied to a pointing device in which said selection is maintained if a vertical component of said force does not decrease relatively quickly, ~~the magnitude of~~ the vertical component of said force does not fall below a first minimum threshold, and [[the]] a magnitude of [[the]] a pointing component of said force does not fall below a second minimum threshold.

9. (Currently Amended) A method of indicating a short duration selection operation based on a force applied to a pointing device, comprising:

determining that a rate of increase of a vertical component of the applied force has exceeded a first threshold,

determining that the vertical component of said applied force has exceeded a second threshold,

determining that a rate of decrease of the vertical component of said applied force has exceeded a third threshold,

determining that said rate of decrease occurred within a certain time interval following occurrence of said rate of increase, and

determining that an accumulation, over a period subtended by said rates of increase and decrease, of a magnitude of a pointing component of said applied force does not exceed a fourth threshold.

10. (Currently Amended) A method of indicating cursor motion from force applied to a pointing device, comprising:

determining if a vertical component of the force is decreasing;

indicating a low cursor motion speed if the vertical component of the force is determined to be decreasing;

determining if [[a]] the vertical component of the force is increasing and exceeding a magnitude of a pointing component of the force;

indicating a low cursor motion speed if the vertical component of the force is determined to be increasing and exceeding [[a]] the magnitude of [[a]] the pointing component of the force; and

relating cursor motion to the pointing component of the force if the vertical component of the force is not decreasing, and relating cursor motion to the pointing component of the force if the vertical component of the force is not increasing and not exceeding a magnitude of a pointing component of the force.

11. (Currently Amended) A method of indicating motion, on a display, of an object from force inputs applied to an input device, comprising:

retrieving force inputs from the input device;

applying the retrieved force inputs to a dual gain transfer function to produce a motion signal, wherein said dual gain transfer function comprises $M_n = L \cdot F_n + H \cdot S(F_n) \cdot F_n$; and

applying the motion signal to indicate motion for the object.

12. (Previously Presented) The method according to Claim 11, wherein said input device is a pointing device and said object is a cursor.

13. (Previously Presented) The method according to Claim 11, wherein applying the retrieved force inputs comprises applying a pointing component of the retrieved force inputs to said dual gain transfer function to produce said motion signal.

14. (Original) The method according to Claim 11, wherein a first derivative of said dual-gain transfer function is continuous.

15. (Cancelled)

16. (Previously Presented) A method of indicating cursor motion from force applied to a pointing device, comprising:

generating a force signal from said force applied to said pointing device;

applying a first non-zero gain to said force signal;

applying a fraction of a second gain to said force signal, wherein said fraction of a second gain is a monotonically increasing function of a magnitude of said force signal, and wherein said second gain is applied only when said magnitude of said force signal is substantially non-decreasing; and

indicating motion of said cursor based on the force signal to which said first and second gain have been applied.

17. (Currently Amended) The method according to Claim 16, wherein said force signal ~~applied to said pointing device~~ is a pointing component of the force applied to said pointing device.

18. (Original) The method according to Claim 16, wherein said second gain is higher than said first gain.

19. (Previously Presented) The method according to Claim 16 in which said monotonically increasing function increases smoothly.

20. (Cancelled)

21. (Currently Amended) A method of indicating selection based on a force applied to a pointing device, comprising:

recognizing a period of relatively increasing selection force on said pointing device in which an accumulation of the selection force exceeds an accumulation of a magnitude of ~~at least one other~~ a pointing force on said pointing device by a predetermined threshold; and

indicating a selection based on the recognized period.

22. (Original) The method according to Claim 21, wherein said selection force is a vertical force on said pointing device.

23. (Currently Amended) The method according to Claim 21, wherein said ~~at least one other~~ pointing force comprises a force applied in a substantially orthogonal direction to said selection force on said pointing device.

24. (Previously Presented) The method according to Claim 21, wherein said pointing force comprises a horizontal force applied to the pointing device.

25. (Previously Presented) The method according to Claim 21 wherein a selection sensitivity is adjustable by adjusting the predetermined threshold.

26. (Currently Amended) A method of maintaining a selection of a pointing device, comprising:

determining a selection component and a pointing component of a force applied to said pointing device; and

maintaining a current selection if the ~~pointing~~ selection component of said force does not decrease more than a variable rate, a magnitude of the selection component of the force does not fall below a first minimum threshold, and a magnitude of the pointing component of the force does not fall below a second minimum threshold.

27. (Original) The method according to Claim 26, wherein said selection component is a vertical component of said force.

28. (Currently Amended) The method according to Claim 26, wherein said variable rate is approximately one quarter of the selection component of said force.

29. (Previously Presented) The method according to Claim 26, wherein said minimum threshold comprises approximately .03 of a maximum applied force.

30. (Previously Presented) A method of indicating a short duration selection operation based on a force applied to a pointing device, comprising:

determining that a rate of increase of a selection component of said applied force has exceeded a first threshold;

determining that the selection component of said applied force has exceeded a second threshold;

determining that a rate of decrease of the selection component of said applied force has exceeded a third threshold;

determining that said rate of decrease occurred within a predetermined time interval;

determining that an accumulation, over a period subtended by said rates of increase and decrease, of a magnitude of the pointing component of said applied force does not exceed a fourth threshold; and

indicating a short duration selection.

31. (Previously Presented) The method according to Claim 30, wherein said short duration selection is a click.

32. (Currently Amended) A method of indicating motion of an object from a force applied to a pointing device, comprising:

indicating an application of motion to said object according to a pointing component of the applied force;

indicating a reduction of motion to said object when a selection component of the applied force is decreasing at a rate faster than a predetermined decrease rate; and

indicating an application of motion to said object when a selection component of the applied force is increasing at a rate greater than a predetermined increase rate and exceeding a magnitude of [[a]] the pointing component of the applied force.

33. (Original) The method according to Claim 32, wherein said object is a cursor.

34. (Previously Presented) The method according to Claim 32, wherein said indication of reduced motion comprises setting a velocity of the object to zero.

35. (Original) The method according to Claim 32, wherein said selection component is a vertical component of the applied force.

36. (Previously Presented) The method according to Claim 32, wherein said selection component is in a first direction and said pointing component is in a plane perpendicular to said first direction.

37. (Currently Amended) A method of indicating movement ~~and selection~~ from a pointing device, comprising:

retrieving a force signal from the pointing device;

applying a dual gain transfer function having a continuous first derivative to a pointing component of the retrieved force signal to produce a motion signal; and

applying the motion signal to indicate motion of a cursor;

wherein applying [[a]] the dual gain transfer function comprises:

applying a first non-zero gain to said ~~force signal~~ pointing component, and

applying, only if a magnitude of the pointing component is non-decreasing, a fractional part of a second gain, which is higher than said first gain, to said ~~force signal~~ pointing component wherein said fractional part of the second gain is based on a smoothly increasing monotonic function of said magnitude of the pointing component.

38. (Currently Amended) A method of indicating selection based on a force applied to a pointing device, comprising:

determining a selection component and a pointing component of the force applied to said pointing device;

recognizing a period of relatively increasing selection ~~force~~ component on said pointing device in which an accumulation of the selection ~~force~~ component exceeds an integral of a magnitude of the pointing component applied on said pointing device by a predetermined selection threshold; and

determining a selection based on the recognized period; and

maintaining a current selection if the ~~pointing~~ selection component of said force does not decrease more than a predetermined rate, ~~a magnitude of~~ the selection component of the force does not fall below a first minimum threshold, and a magnitude of the pointing component of the force does not fall below a second minimum threshold.

39. (Currently Amended) The method according to claim [[15]] 11, wherein said M_n is ~~a minimum~~ an amount of movement, said L is a first gain, said H is a second gain, said F_n is a force, and said $S(F_n)$ is an S-curve function of F_n.

40. (Previously Presented) A method of determining an amount of pointer movement for a pointer, from a force applied to a pointing device, comprising:

assigning a minimum resolvable force to a fraction of a minimum amount of pointer movement; and

accumulating a plurality of fractions of the minimum amount of pointer movement, wherein an amount of pointer movement is related to a pointing component of the applied force according to a dual-gain transfer function.

41. (Currently Amended) The method of claim 40 wherein the amount of pointer movement for a pointer on a display is a ~~monotonically increasing~~ function of the accumulated plurality of fractions of the minimum amount of pointer movement.

42. (Previously Presented) The method of claim 40 wherein accumulating a plurality of fractions further comprises accumulating a plurality of fractions of the minimum amount of pointer movement until a sum of the plurality of fractions of the minimum amount of pointer movement totals at least an integral number.

43. (Previously Presented) The method of claim 42 further comprising:

reporting as an integral number the sum of the fractions of the minimum amount of pointer movement.

44. (Previously Presented) The method of claim 43 whereby the integral number reported is the greatest integral number available from the sum of plurality of fractions of the minimum amount of pointer movement.

45. (Previously Presented) The method of claim 43 further comprising:

retaining any residual fraction of the minimum amount of pointer movement that is greater than the integral number reported.

46. (Previously Presented) The method of claim 45 further comprising:

relating the integral number reported to the amount of pointer movement for a pointer on a display.

47. (New) A method of indicating cursor motion from force applied to a pointing device wherein the indicated cursor motion is related to a pointing component of the applied force according to a dual-gain transfer function, said dual-gain transfer function comprising an S-shaped integral blend.

48. (New) The method according to claim 46 wherein a first derivative of said dual-gain transfer function is continuous.

49. (New) The method according to claim 46 wherein a first derivative of said dual-gain transfer function is a monotonically increasing function that increases smoothly.

50. (New) A method of indicating cursor motion from force applied to a pointing device wherein the indicated cursor motion is related to a pointing component of the applied force according to a dual-gain transfer function, said dual-gain transfer function comprising an S-shaped multiplicative blend.

51. (New) The method according to claim 50 wherein a first derivative of said dual-gain transfer function is continuous.

52. (New) The method according to claim 50 wherein said dual-gain transfer function includes a first relatively lower gain a second relatively higher gain, and wherein said second relatively higher gain is applied only when a magnitude of a pointing component of the force applied is substantially non-decreasing.

53. (New) A method of indicating cursor motion from force applied to a pointing device wherein the indicated cursor motion is related to a pointing component of the applied force according to a dual-gain transfer function, said dual-gain transfer function consisting of a first linear segment having a first derivative and a second linear segment having a second derivative larger than the first derivative, and wherein said first linear segment and said second linear segment meet at a transition point.

54. (New) A method of indicating cursor motion from force applied to a pointing device wherein the indicated cursor motion is related to a pointing component of the applied force according to a first transfer function when a magnitude of the pointing component is substantially non-decreasing, and according to a second transfer function when the magnitude of the pointing component is decreasing.

55. (New) The method according to claim 54 wherein a first derivative of first transfer function is continuous.

56. (New) The method according to claim 54 wherein said first transfer function increases smoothly.

57. (New) The method according to claim 54 wherein the first transfer function comprises a dual-gain transfer function, said dual-gain transfer function comprising blend of a first relatively lower gain and a second relatively higher gain.

58. (New) The method according to claim 57 wherein said second transfer function consists essentially of said first relatively lower gain.

59. (New) The method according to claim 58 wherein said relatively lower gain comprises a constant gain.

60. (New) A method of indicating cursor motion from force applied to a pointing device wherein the indicated cursor motion is related to a pointing component of the applied force according to a dual-gain transfer function, said dual-gain transfer function comprising a blend of a first blending function, said dual-gain transfer function having a smoothness such that a first derivative of said dual gain transfer function is continuous and monotonically increasing and a second derivative of said dual gain transfer function is continuous.

61. (New) A method of indicating cursor motion from force applied to a pointing device wherein the indicated cursor motion is related to a pointing component of the applied force according to a dual-gain transfer function, said dual-gain transfer function having a

continuous first derivative and wherein said first derivative is non-increasing at a point of maximum input force.

62. (New) A method of indicating selection, based on a force applied to a pointing device, comprising:

determining a period of relatively increasing vertical component of said force;

accumulating a difference between a magnitude of said vertical component of said force and a magnitude of a pointing component of said force over said period; and

indicating selection responsive to said accumulated difference between the magnitude of said vertical component of said force and the magnitude of a pointing component of said force exceeding a predetermined threshold.

63. (new) A method of indicating cursor motion from force applied to a pointing device comprising:

determining if a vertical component of the force is not decreasing;

determining if the vertical component of the force is not exceeding the magnitude of a pointing component of the force;

relating cursor motion to a pointing component of the force via a dual-gain transfer function if said vertical component of the force is not decreasing and if said vertical component of the force is not exceeding the magnitude of a pointing component of the force; and

relating cursor motion to a pointing component of the force via a relatively lower gain transfer function if said vertical component of the force is decreasing or if said vertical component of the force is not exceeding the magnitude of a pointing component.

64. (New) A method of indicating selection based on a force applied to a pointing device, comprising:

determining a selection component and a pointing component of the force applied to said pointing device;

recognizing a period of relatively increasing selection component in which an accumulation of the selection component exceeds an accumulation of a magnitude of the pointing component by a predetermined selection threshold; and

determining a selection based on the recognized period; and

maintaining a current selection if the selection component does not decrease faster than a predetermined rate, and the selection component does not fall below a first minimum threshold.